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| APPLICATION NO.                                     | FILING DATE                         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.          |  |
|---|-------------------------------------|----------------------|-------------------------|---------------------------|--|
| 09/171,081  | 12/14/1998                          | SASA KRANJC          | 22681-0002              | 7627                      |  |
| 26633   | 7590 04/20/2005                     |                      | EXAM                    | INER                      |  |
| 11222211 21   | HELLER EHRMAN WHITE & MCAULIFFE LLP |                      |                         | PRATS, FRANCISCO CHANDLER |  |
| 1717 RHODE ISLAND AVE, NW WASHINGTON, DC 20036-3001 |                                     |                      | ART UNIT                | PAPER NUMBER              |  |
|   | •                                   |                      | 1651                    |                           |  |
|   |                                     |                      | DATE MAILED: 04/20/2005 |                           |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  | Application No.  | Applicant(s)  |  |  |
|---|--|--|---|--|--|
|   | ·  | 09/171,081   | KRANJC ET AL.   |  |  |
| Office Action Summary                         |  | Examiner   | Art Unit  |  |  |
|   |  | Francisco C. Prats   | 1651  |  |  |
| Period fo                                     | The MAILING DATE of this communication ap<br>or Reply  | pears on the cover sheet with the  | correspondence address  |  |  |
| THE - Exte after - If the - If NC - Failt Any | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reployeriod for reply is specified above, the maximum statutory period the reply within the set or extended period for reply will, by statuting the reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be ti<br>ly within the statutory minimum of thirty (30) da<br>will apply and will expire SIX (6) MONTHS fror<br>e, cause the application to become ABANDON | imely filed  ys will be considered timely.  In the mailing date of this communication.  ED (35 U.S.C. § 133). |  |  |
| Status  |  |  |   |  |  |
| 1)🖂   | Responsive to communication(s) filed on <u>02 F</u>  | ebruary 2005.  |   |  |  |
| 2a)   |  |  |   |  |  |
| 3)  | <u></u>  |  |   |  |  |
|   | closed in accordance with the practice under   | Ex parte Quayle, 1935 C.D. 11, 4   | 53 O.G. 213.  |  |  |
| Disposit                                      | ion of Claims  |  |   |  |  |
| 4)  🔀   | Claim(s) <u>36,38,42-49,51 and 96</u> is/are pendin  | n in the application   | 4.  |  |  |
| ۰,۱۷۵۹  | 4a) Of the above claim(s) is/are withdra   | = ''   |   |  |  |
| 5) Claim(s) is/are allowed.                   |  |  |   |  |  |
|   | Claim(s) <u>36, 38, 42-49, 51 and 96</u> is/are reject   | eted.  |   |  |  |
| 7) Claim(s) is/are objected to.               |  |  |   |  |  |
| 8)  | Claim(s) are subject to restriction and/o  | or election requirement.   |   |  |  |
| Applicat                                      | ion Papers   |  |   |  |  |
|   | •  |  |   |  |  |
| ·   | The specification is objected to by the Examine  |  | Francisco   |  |  |
| 10)   | The drawing(s) filed on is/are: a) acc   |  |   |  |  |
|   | Applicant may not request that any objection to the  | No.  | · · · · · · · · · · · · · · · · · · ·   |  |  |
| 44)   | Replacement drawing sheet(s) including the correct   |  |   |  |  |
| ' ' <i>'</i>                                  | The oath or declaration is objected to by the E  | xaminer. Note the attached Office  | e Action or form PTO-152.   |  |  |
| Priority ι                                    | ınder 35 U.S.C. § 119  |  | •   |  |  |
| 12)   | Acknowledgment is made of a claim for foreigr  | n priority under 35 U.S.C. § 119(a   | a)-(d) or (f).  |  |  |
| a)  | ☐ All b)☐ Some * c)☐ None of:  |  |   |  |  |
|   | 1. Certified copies of the priority documen  | ts have been received.   |   |  |  |
|   | 2. Certified copies of the priority documen  |  | tion No   |  |  |
|   | 3. Copies of the certified copies of the price   |  |   |  |  |
|   | application from the International Burea   |  | -   |  |  |
| * 5   | See the attached detailed Office action for a list   | of the certified copies not receiv   | ed.   |  |  |
|   |  |  |   |  |  |
|   |  |  |   |  |  |
| Attachmen                                     | t(s)   | 4  |   |  |  |
|   | e of References Cited (PTO-892)  | 4) Interview Summary   |   |  |  |
| 3) 🔲 Infori                                   | e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date   | Paper No(s)/Mail D  5) Notice of Informal  6) Other:   | Date<br>Patent Application (PTO-152)  |  |  |
|   | r No(s)riviali Date rademark Office  | o) outer:  |   |  |  |
| S. Patent and 1<br>TOL-326 (R                 |  | ction Summary , P  | art of Paper No./Mail Date 04152005   |  |  |

Art Unit: 1651

## DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 2, 2005, has been entered.

The amendment filed February 2, 2005, has been received and entered. The text of those sections of Title 35, U.S. Code, not included in this action can be found in a prior office action.

Claims 36, 38, 42-49, 51 and 96 are pending and are examined on the merits.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 36, 38, 42-49, 51 and 96 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the

Art Unit: 1651

written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, claim 36 has been amended to recite that "after the phosphorus initially present in the starting medium is consumed, the concentration of assimilable phosphorus is maintained between 0.0015% w/v and 0.15% w/v during the growth phase of fermentation[.]" However, the specification as filed fails to provide support for this new recitation in claim 36 requiring total consumption of the phosphorus initially present in the medium, followed by .

maintenance of the phosphorus concentration between 0.0015% and 0.15% during the growth phase of the fermentation. Thus, claim 36 and its dependents must be considered to recite new matter.

It is unclear where support for the new limitation resides. The last full paragraph of page 2 of the specification provides that the phosphorus concentration is to be maintained at a concentration below a limit of 0.15% during the growth phase, and that the growth phase may last up to 40 hours. The first full paragraph of page 3 then states that the concentration may be preferably maintained at a concentration between 0.0015% and 0.15%, and then allowed to reduce to a low value, preferably

Application/Control Number: 09/171,081

Art Unit: 1651

zero, by the 40<sup>th</sup> hour of fermentation. Thus, read in context, the specification asserts that the concentration of phosphorus is to be maintained within the specified range until the growth phase is finished, which is about 40 hours, and then allowed to decrease to a value as low as zero. Respectfully, this is much different than saying that the initial concentration may be allowed to become totally depleted, and then maintained within a specified range.

There is nothing in the as-filed specification explicitly or inherently disclosing a process whereby an initial phosphorus concentration is allowed to become totally depleted, followed by adding phosphorus and maintaining it within the specified range, as now recited in the claims. It is noted, as argued by applicant, that the last lines of page 11 of the specification state that "in the first hours of the culture . . . phosphorus was consumed[.]" However, this cannot mean that all the phosphorus was totally consumed, as required by the new claim language, because the Table on page 11 shows measurable amounts of phosphorus still present in the medium after 56 hours. It is further noted, as argued by applicant, that the sentence spanning pages 10 and 11 of the specification state that phosphorus was added to the medium. However, the Table on page 11 clearly states that it displays the amount of phosphorus

Application/Control Number: 09/171,081

Art Unit: 1651

present "in the fermentation broth", and nowhere is there a suggestion that the initial phosphorus was allowed to totally deplete, followed by adding phosphorus and maintaining within the claim-specified range. A holding of new matter is clearly required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 38 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 38 does not appear to logically follow from claim 36. Claim 36 requires the phosphorus concentration to be maintained within a range of 0.0015% to 0.15%. However, claim 38 requires the phosphorus concentration to be allowed to decrease to zero. It is confusing how the phosphorus concentration can be maintained within a range of 0.0015% to 0.15%, yet simultaneously be allowed to decrease to zero.

## Response to Arguments

All of applicant's argument has been fully considered to the extent applicable to the grounds of rejection set forth herein, but is not persuasive of error. The issue of new matter is discussed above. The claims are considered free of the prior art because the prior art does not suggest a clavulanic fermentation process whereby an initial phosphorus concentration is allowed to become totally depleted, followed by adding phosphorus and maintaining it within the claim-specified range.

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francisco C. Prats whose telephone number is 571-272-0921. The examiner can normally be reached on Monday through Friday, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 09/171,081 Page 7

Art Unit: 1651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toli-page).

Francisco C. Prats Primary Examiner Art Unit 1651

FCP